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EXAMINER	
LAVARIAS, ARNEL C	
ART UNIT	PAPER NUMBER
2872	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,663	IANNARELLI ET AL.	
	Examiner	Art Unit	
	Arnel C. Lavarias	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 December 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/20/07 has been entered.

Response to Amendment

2. The amendments to Claim 1 in the submission dated 12/20/07 are acknowledged and accepted.

Response to Arguments

3. The Applicants' arguments with respect to Claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

4. Claims 1-18 are now rejected as follows.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites the limitation that the encircling band is adapted to *completely encircle* a head of a wearer at the wearer's forehead region. However, in reviewing Figures 1-3, 9 of Applicants' disclosure, it appears that an encircling band (See for example 14 in Figure 1) does not completely encircle the head of a wearer. In fact, the two ends of the encircling band are directly connected to either side of a mounting bracket (See for example 24 in Figure 1). It appears to be the combination of the encircling band and the mounting bracket that completely encircles the head of a wearer at the wearer's forehead region. Claims 2-18 are dependent on Claim 1, and hence inherit the deficiencies of Claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 3-5, 7-8, 11-13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek (U.S. Patent No. 5179735), of record, in view of Radna (U.S. Patent Application Publication US 2004/0070823 A1), of record, Mattes (U.S. Patent No. 5469578), of record, and Piontkowski (U.S. Patent No. 7207531), of record.

Thomanek discloses an apparatus for head mounting gear for hands free operation (See Figures 1-7) comprising a head mounting means (See for example 46, 47, 124, 130, 126, 133, 135, 137 in Figure 1, Figure 7) comprising a non-rigid encircling band (See for example 131 in Figures 1 and 7, which is a strap/webbing that is flexible enough to be threaded through buckles 133) adapted to encircle a head of a wearer and a non-rigid top band (See for example 130 in Figures 1, 7, which is a strap/webbing which is flexible enough to be threaded through buckles 126/127/128) adapted to go over the top of the head of the wearer and connected to said non-rigid encircling band; a mounting bracket (See 50, 42 in Figures 2, 7) mounted to said non-rigid encircling band; a support bar (See 24 in Figures 2-3) having a proximal (See region of 24 joining 52 in Figures 2-3) and a distal end (See region of 24 joining 60 in Figures 3-4); said support bar being lockable by a detent mechanism in a position for use (See 84 in Figure 2); a quick release mounting mechanism (See 63, 64, 65 in Figure 2) mounted on the distal end of said support bar; gear (See 10 in Figure 2) mounted to said quick release mounting mechanism; and wherein said gear may be used without being held by hand. Thomanek additionally discloses the proximal end of the support bar being provided with a spring loaded releasable pin which mates with an opening in the mounting bracket to form the detent mechanism (See 48 in Figure 3; 76, 81, 103 in Figures 2, 5); the pin in the proximal end

of the support bar being released by a pin release means (See 84 in Figure 2; 33 in Figure 5); the quick release mounting mechanism being adjustably pivotally mounted on the distal end of the support bar (See 22, 23 in Figure 1; 72, 73 in Figures 2, 4); the support bar has two sections formed at approximately 90 degrees to each other (See 24 in Figure 3); the two sections of the support bar are provided with means for adjusting the length of each section (See 84, 52 in Figure 2; 52, 33, 60 in Figure 3); the encircling band is provided with means for adjusting its length (See for example 133 in Figures 1, 7); and the top band is provided with means for adjusting its length (See for example 126 in Figures 1, 7). Thomanek lacks the encircling band being a single encircling band completely encircling a head of a wearer at the wearer's forehead region; said mounting bracket having a pivot means and also mounted to the top band; said support bar being pivotally mounted at its proximal end to said pivot means of said mounting bracket; said support bar being lockable by a detent mechanism in a position for storage or a position for use which accommodates a wearer; and the gear being selected to be binoculars or a range finder. However, Radna teaches a head-mounted assembly for mounting an optical system (See Figures 1-3), such as binoculars (See 6 in Figure 1), wherein a mounting bracket (See for example 24 in Figure 1) having pivot means (See Figure 1a) is attached to a proximal end of a support bracket (See 9 in Figure 1, 1a). Further, the support bracket is lockable by a detent mechanism (See 25, 26, 27 in Figure 1a) to any discrete number of positions in a 360-degree circle, such that the optical system may be positioned in or out of the person's viewing area, i.e. the binocular is in use or is in a stored position. Therefore, it would have been obvious to one having ordinary skill in the

art at the time the invention was made to have the mounting bracket have a pivot means; said support bar be pivotally mounted at its proximal end to said pivot means of said mounting bracket; said support bar be lockable by a detent mechanism in a position for storage or a position for use which accommodates a wearer; and the gear be selected to be binoculars or a range finder, as taught by Radna, in the apparatus of Thomanek, to 1) allow for quick positioning of the gear (i.e. binocular) during use, 2) prevent movement of the gear once the gear has been properly positioned, and 3) expand the range of usable applications of the head-mounted assembly. The combined teachings of Thomanek and Radna lack the encircling band being a single encircling band completely encircling a head of a wearer at the wearer's forehead region and the mounting bracket also mounted to the top band. However, Mattes teaches a conventional night vision goggle headgear mount (See for example Figures 1-2), wherein the headgear mount includes an encircling band (See for example 22, 44 in Figure 1) which encircles the head of a wearer at the wearer's forehead region. In addition, a mounting bracket (See for example 14, 18, 20 in Figures 1-2) is utilized to mount night vision goggles (See for example 12 in Figure 1) to the headgear mount. In particular, the mounting bracket is attached to both the encircling band (See 22, 44 in Figure 1), as well as a top band (See for example 32 in Figures 1-2) of the headgear mount. Further, Piontkowski teaches a conventional head gear for a binocular microscope (See for example Abstract; Figure 1), wherein the head gear (See for example 19, 20, 22, 25 in Figure 1) includes a single encircling band (See for example 19 in Figures 1-2) that completely encircles a head of a wearer at the wearer's forehead region (See Figure 1). Thus, it would have been obvious to one having ordinary skill in

the art at the time the invention was made to have the encircling band be a single encircling band completely encircling a head of a wearer at the wearer's forehead region and the mounting bracket also mount to the top band, as taught by Mattes and Piontkowski, in the apparatus of Thomanek and Radna, to allow for increased stability against side-to-side motion while the headgear is worn, while allowing for the encircling band, bracket, and top band to be formed of one integral piece which reduces complexity of construction and assembly of the headgear.

9. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claim 1, except for the encircling band and top band being made of neoprene. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the encircling band and top band be made of neoprene, since it has been held to be within ordinary skill of worker in the art to select a known material on the basis of suitability for the intended use. One would have been motivated to have the encircling band and top band be made of neoprene, to take advantage of this material's superior characteristics: high physical toughness; high resistance to degradation from UV, weather, ozone; wide useful temperature range; and high resistance to burning, flexing, and twisting damage. *Sinclair & Carroll Co. v. Interchemical Corp., 325 U.S. 327, 65 USPQ 297 (1945).*

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski as applied to Claim 1 above, and further in view of Holmberg (U.S. Patent Application No. US 2002/0071050 A1), of record.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claim 1, except for the quick release mounting mechanism having a channel for receiving a pair of guide rails on a selected gear. However, the use of such corresponding channels and rails for mounting an optical system such as binoculars or range finders is well known in the art. For example, Holmberg teaches a conventional video camera with integrated range finder system (See for example Figures 1, 5-6), wherein the camera includes a pair of rails (See 14 in Figure 1) which mount onto a corresponding rail on a mounting assembly, such as a bow or rifle, (See 92 in Figures 5-6) so that the camera may be quickly attached and removed. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the quick release mounting mechanism have a channel for receiving a pair of guide rails on a selected gear, as taught by Holmberg, in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, for the purpose of speeding up removal and attachment of the gear (i.e. binocular or range finder) onto the mounting assembly.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski as applied to Claim 1 above, and further in view of Holmberg.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claim 1, except for the gear being a range finder provided with a remote

control. However, it is well known that optical systems including range finders may be mounted, and that such range finder systems may include remote controls. For example, Holmberg teaches a conventional video camera with integrated range finder system (See for example Figures 1, 5-6), which may be mounted onto a mounting assembly, such as a rifle or bow. In addition, such systems may include a remote control (See 61 in Figure 1) to remotely control various functions of the system. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the gear be a range finder provided with a remote control, as taught by Holmberg, in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, for the purpose of 1) extending the capabilities of the optical system by providing additional distance information, and 2) allowing for remote operation of the system without physically disturbing the mounting or optical apparatus.

12. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski, and further in view of Holmberg as applied to Claims 1, 9 above, and further in view of Fergason (U.S. Patent Application Publication US 2005/0017152 A1), of record.

Thomanek in view of Radna, Mattes, and Piontkowski, and further in view of Holmberg discloses the invention as set forth above in Claims 1, 9 above, except for the remote control being provided with a clip for clipping the remote control to an article of clothing of the wearer. However, providing clips on remote controls is known in the art. For example, Fergason teaches a wireless remote control for an optical system (See for example Figure 1A), wherein the remote control (See 20 in Figure 1A) is provided with

means for attaching the remote control onto the clothing of the user (See Paragraph 0073). Although clips are not specifically mentioned, such clips are well known for performing the function of attaching an article onto clothing, similar to that of other means, such as Velcro or snap fasteners. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the remote control be provided with a clip for clipping the remote control to an article of clothing of the wearer, as taught by Fergason, in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, and further in view of Holmberg, to prevent loss or misplacement of the remote control during use of the apparatus.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski as applied to Claims 1, 7 above, and further in view of Johnson (U.S. Patent No. 5437427), of record.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claims 1, 7, except for the sections being adjustable in length by tubing slidable one within the other and being retained by a tightenable clutch. However, it is well known and conventional to utilize telescoping tubes to provide length adjustment. For example, Johnson teaches a binocular mounting assembly (See for example Figure 1), wherein the support arm used to mount the binocular may be adjusted in length to provide positional adjustment by using telescoping tubes (See 18 in Figure 1). Although Johnson does not explicitly disclose means for retaining the support arm after telescoping the support arm, such would have been evident and obvious to one having ordinary skill. The use of screws or a friction collar (e.g. tightenable clutch) would have been obvious as

a means for retaining the support arm to keep it in place once positioned. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the sections be adjustable in length by tubing slidable one within the other and being retained by a tightenable clutch, as taught by Johnson, in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, for the purpose of providing large overall length changes as well as providing additional adjustment in the form of an additional freedom of movement around a rotation axis.

14. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski as applied to Claim 1 above, and further in view of Wannagot et al. (U.S. Patent No. 5703354), of record.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claim 1, except for the quick release mounting mechanism being provided with a spring clip which retains a pair of guide rails on the gear in a channel formed in the quick release mounting mechanism. However, Wannagot et al. teaches a binocular night vision device attached to an assembly structure to a helmet (See for example Figures 1, 8). In particular, the assembly structure utilizes a pair of rails (See 44 in Figures 1, 8) to allow the binocular to be quickly attached and detached to the assembly structure via a dove-tail plate mounted (See 50 in Figure 2) on the binocular. Further, instead of screws, a retaining mechanism in the form of a pawl or spring clip (See col. 6, lines 23-50) is used to engage the dove-tail plate to lock the binocular in place. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the quick release mounting mechanism be provided with a spring clip

which retains a pair of guide rails on the gear in a channel formed in the quick release mounting mechanism, as taught by Wannagot et al., in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, for the purpose of speeding up removal and attachment of the gear (i.e. binocular or range finder) onto the mounting assembly.

15. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski, and further in view of Holmberg as applied to Claims 1, 6 above, and further in view of Vander Ley (U.S. Patent No. 4423914), of record.

Thomanek in view of Radna, Mattes, and Piontkowski, and further in view of Holmberg discloses the invention as set forth in Claims 1, 6, except for the channel being provided with a resilient pad at its distant end for securely retaining the pair of guide rails in position without movement. However, the use of such resilient pads in such channel-rail assemblies is known in the art. For example, Vander Ley teaches a conventional drawer slide mechanism (See for example Figure 1), wherein a pair of rails (See 42, 40 in Figure 1) integrated on a slide (See 16 in Figure 1) is inserted into a channel (See 18 in Figure 1). The distal end of the channel includes a rubber stop (See 36 in Figure 1) overlaying the end piece (See 34 in Figure 1) to provide a cushioned stop on the slide within the channel, while preventing movement once the slide is fully inserted into the channel. Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the channel be provided with a resilient pad at its distant end for securely retaining the pair of guide rails in position without movement, as taught by Vander Ley, in the apparatus of Thomanek in view of Radna, Mattes, and

Piontkowski, and further in view of Holmberg, for the purpose of preventing damage to the channel or rails of the mounting apparatus, while allowing for cushioned stops during insertion of the rails into the channel.

16. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thomanek in view of Radna, Mattes, and Piontkowski as applied to Claim 1 above, and further in view of Baril et al. (U.S. Patent No. 5331684), of record.

Thomanek in view of Radna, Mattes, and Piontkowski discloses the invention as set forth above in Claim 1, except for the mounting bracket including a stop to prevent the support bar from pivoting beyond a predetermined point thereby preventing the gear from contacting the wearer. However, Baril et al. teaches a conventional helmet mounting assembly for an optical assembly (See for example Figures 1a, b), such as a night vision device (See 12 in Figures 1a, b), wherein the night vision device may be positioned in a deployed (See Figures 1a, 6) and stowed position (See Figures 1b, 5). In the deployed position (See Figure 6), the night vision device is held in position by both a locking ball (See 86 in Figure 6) and a physical stop in the form of the central portion of a spacer block (See 60 in Figures 4, 6; col. 5, line 25-col. 6, line 28). Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the mounting bracket also include a stop to prevent the support bar from pivoting beyond a predetermined point thereby preventing the gear from contacting the wearer, as taught by Baril et al., in the apparatus of Thomanek in view of Radna, Mattes, and Piontkowski, to prevent the user from getting hurt (especially from eye damage due to the gear striking the eyes) during use of the apparatus.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 10:00 AM - 6:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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